

REMARKS

The Examiner is thanked for the thorough examination and search of the subject patent application. Applicants apologize for using an incorrect version of the previous claims 26-34. The current amendment is made to the correct version of the previously presented claims (on 8 July 2005).

Claims 26-52 are pending, wherein Claims 26-41 and 45 are currently amended. Claim 26 has been amended to claim a method of checking an electronic package comprising reading a mark with a laser code reader. This method is described on page 17 of the Specification. Claim 33 has been amended to claim an electronic package comprising a mark read by a laser code reader. Claim 38 has been amended to claim a mark read by a laser code reader rather than a "laser-readable" mark. The remaining claims have been amended to reflect the amendments to their independent claims and to correct some typographical errors.

Response to Claim Rejections under 35 U.S.C. 102 and 103

Applicants respectfully traverse the rejections for at least the reasons set forth below.

Response to Claims 26-32

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As currently amended, independent claim 26 is recited below:

26. A method for checking an electronic package, comprising:
providing said electronic package with a mark; and
reading said mark using a laser code reader.
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Reconsideration of Claims 26-32 rejected under 35 U.S.C. 103(a) as being unpatentable by JP362169448 to Hiromasa et al is requested in accordance with the following remarks.

Applicants respectfully assert that the method for checking an electronic package claimed in amended claim 26 patentably distinguishes over the citation by Hiromasa et al (JP362169448).

Hiromasa et al teach an electronic package 1 with a mark over which a transparent resin is coated. ~ See FIG. 4 ~ However, Hiromasa et al fail to teach, hint or suggest that the method for checking an electronic package comprises reading the mark using a laser code reader.

In the latest Office Action mailed Nov. 4, 2005, the Examiner considers that Hiromasa et al teach the symbol can include letters and number and symbols, but is silent to a barcode. The Examiner notes that a bar code is an obvious expedient. Furthermore, the Examiner considers that one would have been motivated to use a barcode to permit accurate and machine readable information, as is conventional in the art, and considers that barcodes are well known to be laser readable, for ease of reading/convenience of the user, and barcodes are also known to be readable under transparent protective layers, as discussed in the previous Office Action. ~ See page 4, lines 10-1, in the Office Action mailed Nov. 4, 2005 ~

However, applicant does not consider that the fact of “applying a barcode onto Hiromasa et al’s electronic package” is an obvious expedient because Hiromasa et al fail to teach, hint or suggest that an electronic reader can be used to read any information marked on an electronic package.

Therefore, applicant considers that the subject matter of “reading a mark of an electronic package using a laser code reader” should be patentable, because the subject matter is not taught, hinted or suggested in any reference. For at least the foregoing reasons, applicant respectfully submits independent claim 26 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 27-32 patently define over the prior art as well.

Response to Claims 33-37

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As currently amended, independent claim 33 is recited below:

33. An electronic package comprising a mark read by a laser code reader.

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Reconsideration of Claims 33-37 rejected under 35 U.S.C. 103(a) as being unpatentable by JP362169448 to Hiromasa et al is requested in accordance with the following remarks.

Applicants respectfully assert that the method for checking an electronic package claimed in claim 33 patentably distinguishes over the citation by Hiromasa et al (JP362169448).

Hiromasa et al teach an electronic package 1 with a mark over which a transparent resin is coated. ~ *See FIG. 4* ~ However, Hiromasa et al fail to teach, hint or suggest that the mark is read by a laser code reader.

In the latest Office Action mailed Nov. 4, 2005, the Examiner considers that Hiromasa et al teach the symbol can include letters and number and symbols, but is silent to a barcode. The Examiner notes that a bar code is an obvious expedient. Furthermore, the Examiner considers that one would have been motivated to use a barcode to permit accurate and machine readable information, as is conventional in the art, and considers that barcodes are well known to be laser readable, for ease of reading/convenience of the user, and barcodes are also known to be readable under transparent protective layers, as discussed in the previous Office Action. ~ *See page 4, lines 10-1, in the Office Action mailed Nov. 4, 2005* ~

However, applicant does not consider that the fact of “applying a barcode onto Hiromasa et al’s electronic package” is an obvious expedient because Hiromasa et al fail to teach, hint or suggest that an electronic reader can be used to read any information marked on an electronic package.

Therefore, applicant considers that the subject matter of “an electronic package comprising a mark read by a laser code reader” should be patentable, because the subject matter is not taught, hinted or suggested in any reference. For at least the foregoing reasons, applicant respectfully submits independent claim 33 patently distinguishes over the prior art references,

and should be allowed. For at least the same reasons, dependent claims 34-37 patently define over the prior art as well.

Response to Claims 38-43

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As currently amended, independent claim 38 is recited below:

38. A semiconductor chip having a surface with a mark read by a laser code reader.

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Section I

Reconsideration of Claims 38 and 39 rejected under 35 U.S.C. 102(b) as being anticipated by JP406196575 to Hamagishi and of claims 40, 41 and 42 rejected under 35 U.S.C. 103(a) as being unpatentable over JP406196575 to Hamagishi is requested in accordance with the following remarks.

Applicants respectfully assert that the method for checking an electronic package claimed in claim 38 patentably distinguishes over the citation by Hamagishi (JP406196575).

Hamagishi teaches a semiconductor chip having a surface with a mark. ~ See FIGS. 2 and 3 ~ However, Hamagishi fails to teach, hint or suggest that the mark is read by a laser code reader.

Hamagishi teaches a barcode is printed onto a semiconductor chip, but fails to teach, hint or suggest that the barcode is read by a laser code reader. Those skilled in the art should understand that various code readers, such as laser code reader, infrared code reader, charge coupled device (CCD) code reader, and etc., can be used to read a bar code. However, Hamagishi fails to teach, hint or suggest what kind of the barcode is printed on Hamagishi's semiconductor chip and what kind of the code reader is used to read the barcode printed on Hamagishi's semiconductor chip.

Therefore, applicant considers that the subject matter of "a semiconductor chip comprising a mark read by a laser code reader" should be patentable, because the subject matter is not taught, hinted or suggested in any reference. For at least the foregoing reasons, applicant respectfully submits independent claim 38 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 39-43 patently define over the prior art as well.

Section II

Reconsideration of Claims 38-40 rejected under 35 U.S.C. 102(b) as being anticipated by US5,129,974 to Aurenus and of claims 41 and 43 rejected under 35 U.S.C. 103(a) as being unpatentable over US5,129,974 to Aurenus is requested in accordance with the following remarks.

Applicants respectfully assert that the method for checking an electronic package claimed in claim 38 patentably distinguishes over the citation by Aurenus (US5,129,974).

Aurenus teaches an electronic package or semiconductor chip having a surface with a mark. ~ See *FIGS. 2 and 8* ~ However, Aurenus fails to teach, hint or suggest that the mark is read by a laser code reader.

Aurenus teaches a barcode is marked on an electronic package or semiconductor chip, but fails to teach, hint or suggest that the barcode is read by a laser code reader. Those skilled in the art should understand that various code readers, such as laser code reader, infrared code reader, charge coupled device (CCD) code reader, and etc., can be used to read a bar code. However, Aurenus fails to teach, hint or suggest what kind of the barcode is marked on Aurenus' electronic package or semiconductor chip and what kind of the code reader is used to read the barcode marked on Aurenus' electronic package or semiconductor chip.

Therefore, applicant considers that the subject matter of "a semiconductor chip comprising a mark read by a laser code reader" should be patentable, because the subject matter is not taught, hinted or suggested in any reference. For at least the foregoing reasons, applicant respectfully submits independent claim 38 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 39-43 patentably define over the prior art as well.

Section III

Reconsideration of Claims 38-41 and 43 rejected under 35 U.S.C. 103(a) as being unpatentable by JP362169448 to Hiromasa et al and of claim 42 rejected under 35 U.S.C. 103(a) as being unpatentable over JP362169448 to Hiromasa in view of Hikita et al US6,476,499 is requested in accordance with the following remarks.

Applicants respectfully assert that the method for checking an electronic package claimed in claim 38 patentably distinguishes over the citation by Hiromasa et al (JP362169448).

Hiromasa et al teach an electronic package 1 with a mark over which a transparent resin 4 is coated. ~ See FIG. 4 ~ However, Hiromasa et al fail to teach, hint or suggest that a mark is marked on a semiconductor chip and is read by a laser code reader.

Applicant considers that the subject matter of “a semiconductor chip comprising a mark read by a laser code reader” should not be come up with, because those skilled in the art should think a mark will be marked on an electronic package, not a semiconductor chip, if a mark is needed, following Hiromasa et al’s teaching. Furthermore, Hiromasa et al fail to teach, hint or suggest that a mark can be read by a laser code reader.

Furthermore, the method of Hikita et al for stacking semiconductor chips has nothing to do with either Applicant’s invention or with Hiromasa et al’s invention.

Therefore, applicant considers that the subject matter of “a semiconductor chip comprising a mark read by a laser code reader” should be patentable, because the subject matter

is not taught, hinted or suggested in any reference. For at least the foregoing reasons, applicant respectfully submits independent claim 38 patentably distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 39-43 patentably define over the prior art as well.

Response to Claims 44-49

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As currently amended, independent claim 44 is recited below:

44. An electronic package comprising:
 a semiconductor chip having a first surface with multiple pads and a second surface with a mark; and
 a protecting structure over said mark, wherein said mark is visible through said protecting structure.

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Reconsideration of Claims 44-49 rejected under 35 U.S.C. 103(a) as being unpatentable by JP362169448 to Hiromasa et al is requested in accordance with the following remarks.

Applicants respectfully assert that the method for checking an electronic package claimed in claim 44 patentably distinguishes over the citation by Hiromasa et al (JP362169448).

Hiromasa et al teach an electronic package 1 having a top surface with a mark over which a transparent resin 4 is coated. ~ See FIG. 4 ~ However, Hiromasa et al fail to teach, hint or suggest that a semiconductor chip has a mark.

Applicant considers that the subject matter of “a semiconductor chip having a mark visible through a protecting structure” should not be come up with, because those skilled in the art should think a mark visible through a protecting structure will be marked on an electronic package, not a semiconductor chip, if a mark is needed, following Hiromasa et al’s teaching.

Therefore, applicant considers that the subject matter of “a semiconductor chip comprising a mark visible through a protecting structure” should be patentable, because the subject matter is not taught, hinted or suggested in any reference. For at least the foregoing reasons, applicant respectfully submits independent claim 44 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 45-49 patently define over the prior art as well.

Response to Claims 50-52

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As currently amended, independent claim 50 is recited below:

50. An electronic package comprising:
a semiconductor chip having a surface with a mark comprising a number, a bar code, or an identity for a product or a manufacturer; and
a protecting structure over said mark, wherein said mark is visible through said protecting structure.

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Reconsideration of Claim 50 rejected under 35 U.S.C. 102(b) as being unpatentable by JP362169448 to Hiromasa et al and of claim 51 rejected under 35 U.S.C. 103(a) as being unpatentable over JP362169448 to Hiromasa in view of Hikita et al US6,476,499 and of claim 52 rejected under 35 U.S.C. 103(a) as being unpatentable over JP406196575 to Hamagishi is requested in accordance with the following remarks .

Applicants respectfully assert that the method for checking an electronic package claimed in claim 50 patentably distinguishes over the citation by Hiromasa et al (JP362169448).

Hiromasa et al teach an electronic package 1 having a top surface with a mark over which a transparent resin 4 is coated. ~ See FIG. 4 ~ However, Hiromasa et al fail to teach, hint or suggest that a semiconductor chip has a mark.

Applicant considers that the subject matter of “a semiconductor chip having a mark visible through a protecting structure” should not be come up with, because those skilled in the art should think a mark visible through a protecting structure will be marked on an electronic package, not a semiconductor chip, if a mark is needed, following Hiromasa et al’s teaching.

Furthermore, the method of Hikita et al for stacking semiconductor chips has nothing to do with either Applicant’s invention or with Hiromasa et al’s invention.

Therefore, applicant considers that the subject matter of “a semiconductor chip comprising a mark visible through a protecting structure” should be patentable, because the subject matter is not taught, hinted or suggested in any reference. For at least the foregoing reasons, applicant respectfully submits independent claim 50 patently distinguishes over the prior art references, and should be allowed. For at least the same reasons, dependent claims 51-52 patently define over the prior art as well.

CONCLUSION

Some or all of the pending claims are believed to be in condition for allowance. Accordingly, allowance of the claims and the application as a whole are respectfully requested.

It is requested that should Examiner Walsh not find that the Claims are now Allowable that he call the undersigned at 845 452-5863 to overcome any problems preventing allowance.

Respectfully submitted,



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